

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
2 June 2005 (02.06.2005)

PCT

(10) International Publication Number
WO 2005/048729 A1

(51) International Patent Classification⁷: **A23G 9/28**

(21) International Application Number:
PCT/EP2004/052646

(22) International Filing Date: 25 October 2004 (25.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
GE2003A000083 29 October 2003 (29.10.2003) IT

(71) Applicant (*for all designated States except US*): ALI S.p.A. - CARPIGANI GROUP [—/IT]; Via Emilia 45, I-40011 Anzola Emilia (IT).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **COCCHI, Gino**

[IT/IT]; Via Molinelli 39, I-40100 Bologna (IT). **ZANI-BONI, Gianni** [IT/IT]; Via Moglio 13/4, I-40044 Borgonuovo Di Sasso Marconi (IT).

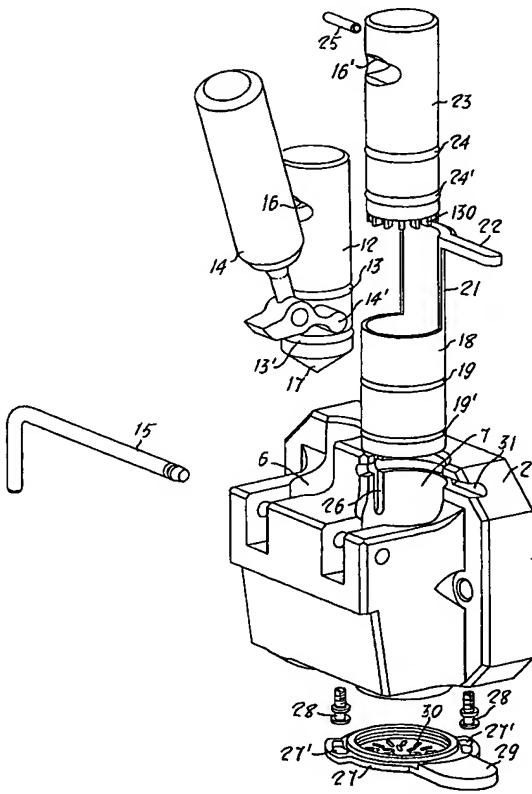
(74) Agents: **PORSIA, Attilio et al.**; Succ. Ing. Fischetti & Weber, 3/2, Via Caffaro, I-16124 Genova (IT).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

[Continued on next page]

(54) Title: HATCH WITH DISPENSING PISTON FOR ICE CREAM MAKING MACHINES WITH POSSIBILITY OF CHOOSING THE FORM OF ICE CREAM DISPENSED



(57) Abstract: Hatch with dispensing piston for ice cream making machines, characterized in that it comprises at least one cylindrical seat with a vertical axis communicating by means of a radial duct with the freezing cylinder and housing, in a manner rotatable about its axis, a cylindrical sleeve provided with a radial hole and with operating means for aligning in a first portion said hole with the outlet of the radial duct connected to the freezing cylinder, while in a second position this cylindrical sleeve closes off the connection with the freezing cylinder, said sleeve having mounted inside it in an axially slidable manner a dispensing piston, the bottom of said second cylindrical seat being closed off by a base element provided with a plurality of openings suitably shaped for extruding the ice cream. This hatch may be in the form of a single or double hatch.



ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *with international search report*